



United States  
Department of  
Agriculture

Forest  
Service

Southwestern  
Region

517 Gold Avenue SW.  
Albuquerque, NM 87102-0084

Reply to: 3420

Date: May 19, 1988

Subject: Winter Damage and Fir Looper Defoliation

To: Forest Supervisor, Lincoln National Forest

On May 10, Jerry Beatty and Dayle Bennett, of our staff, joined you and several members of your staff on an examination of damaged conifers in the vicinity of Upper Pendleton Canyon on the Cloudcroft and Mayhill Ranger Districts, Lincoln National Forest. The purpose of this letter is to document our evaluation regarding the cause of that damage and to offer an estimate regarding additional damages as well as a recommended course of action.

As you saw, the most noticeable damage was fading of ponderosa pine, southwestern white pine, Douglas-fir, and to a lesser extent, white fir foliage at scattered locations within a 3,000-acre area loosely bounded on the north by Wayland Canyon, on the east and south by Agua Chiquita, and on the west by Scott Able Canyon. We plan to obtain more accurate acreage and intensity estimates during aerial detection surveys scheduled for June 27 through July 1.

The amount of damage varied greatly among size classes, aspects and elevations, as well as from tree to tree, species to species, and area to area, showing no consistent pattern. In some areas, recently logged stands exhibited greater damage than adjacent or opposite slope unlogged areas; however, in other locations, the reverse was true. On some trees only a few needles had been damaged, while up to 100 percent of the needles on other trees had faded.

From our examination of these areas we concluded most of this fading was caused by some abiotic factor, probably a weather related phenomenon, such as winter drying. We expect these damaged needles to continue fading over the next few weeks, then drop off as they dry out. This will give some of the more damaged areas an unhealthy, even dead appearance. However, during our examination of several damaged trees in the area, we found the newly forming buds are sound and should develop into healthy needles by mid-June. This compliment of new needles will sustain most of these trees, and barring any additional stress and/or damaging agents, we predict the majority will survive this damage. We recommend your field personnel continue to monitor these areas and the condition of these trees throughout the summer, then contact us if the new foliage appears to be damaged or if bark beetle activity is noted in these trees.

Also observed during our examination was the scattered occurrence of light to moderately defoliated Douglas-fir and white fir. Defoliation was most noticeable in the upper crown of overstory trees, but was also noted in the understory. This defoliation is being caused by a looper, probably New Mexico

Caring for the Land and Serving People





Forest Supervisor, Lincoln National Forest

2

fir looper, Galenara consimilis (Heinrich). As we discussed, past outbreaks of this insect have caused heavy defoliation on up to 10,000 acres of Douglas-fir, white fir, and occasionally southwestern white pine in the Sacramento and Capitan Mountains. While very little is known about the life cycle of these loopers, past outbreaks have usually collapsed after two to three years of defoliation, and have resulted in very little permanent damage. Indications are that these looper populations began to increase last year, resulting in some defoliation, and are continuing to build and defoliate this year. We anticipate defoliation may be more widespread, more intensive, and more noticeable next year, but expect no significant, long-term damages to result.

Please contact us if you have any questions regarding this evaluation or other pest activity.

DOUGLAS L. PARKER  
Director of Forest Pest Management

cc:

DRF, RES

DRF, S&PF

TM

